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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 933,008	08 21 2001	James Ching Sik Lau	1928-0122P-SP	6084

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EXAMINER

GONZALEZ, JULIO C

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 05 07 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/933,008

**Applicant(s)**

SIK LAU, JAMES CHING

**Examiner**

Julio C. Gonzalez

**Art Unit**

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2                      6) ☐ Other:

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: reference 62. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the spring connectors electrically connected to the motor terminals by way of the brush holders as disclosed in claim 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "EMI" needs to be define/spell out in the specifications and in the claims in order to properly know if the claims/specifications are referring to an electromagnetic interference device.

In claims 2 and 5, what is meant by "the or each" terminal? One terminal? All terminals?

In claims 6, 7 and 13, the claims refer to a body, what body is it? The cover? Motor? End cap?

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner. Moreover, it will be assumed that the EMI device refers to an electromagnetic interference device.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Mayumi et al and Ozaki (JP 407107709A).

Sato discloses a miniature motor having an end cap, a body, two brushes 4 and two motor terminals 2 for connecting power to the brushes (see figure 4). However, Sato does not disclose explicitly that the body be made of insulating material.

On the other hand, Mayumi et al discloses for the purpose of avoiding unwanted rotation of a cover plate and reducing dust to enter inside the motor, a miniature motor having an end cap body 5 made of insulating material and having a cover 4 made of conductive material (see figure 2).

However, neither Sato nor Mayumi et al disclose using an EMI device in a brush holder.

On the other hand, Ozaki discloses for the purpose of making a motor having large noise suppression, a brush holder 7 having has an EMI device 10,

which has three input terminals (see abstract and figure 3). Moreover, figure 3 shows two terminals of the EMI device connected to the motor terminals and one to ground, as it is well known in the art, since every chip must be grounded.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a miniature motor as disclosed by Sato and to modify the invention by having the body being made of insulating material for the purpose of avoiding unwanted rotation of a cover plate and reducing dust to enter inside the motor as disclosed by Mayumi et al and to use an EMI chip in a brush holder for the purpose of making a motor having large noise suppression as disclosed by Ozaki.

7. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato, Ozaki and Mayumi et al as applied to claim 1 above, and further in view of Stevenson et al (US 5,973,906).

The combined motor disclosed all of the elements above. However, the combined motor does not disclose explicitly that the EMI device may have two earth terminals.

Although, it is a matter of design choice and well known in the art that chips may have more than one ground connection, Stevenson et al discloses for the

purpose of providing an improved grounded feed through filter thus preventing EMI external interferences, an EMI device 30b having a plurality of grounded connections 42b (see figures 1-7, 17, 21, 22, 23A).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined motor as disclosed above and to modify the invention by using more than one ground connections for the purpose of providing an improved grounded feed through filter thus preventing EMI external interferences as disclosed by Stevenson et al.

8. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato, Ozaki and Mayumi et al as applied to claim 1 above, and further in view of Paukovits, Jr. et al.

The combined motor disclosed all of the elements above. However, the combined motor does not disclose explicitly that the EMI device may use springs to make connections.

On the other hand, Paukovits et al discloses for the purpose of providing an EMI device that is easily removable and replaceable, an EMI device 50 having spring sections 66 and 68, which may be connected to a conductor 10 (see figures 3, 4A, 4B).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined motor as disclosed above and to modify the invention by using springs to make electrical connections for the purpose of providing an EMI device that is easily removable and replaceable as disclosed by Paukovits et al.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato, Ozaki and Mayumi et al as applied to claim 1 above, and further in view of Burgess et al.

The combined motor disclosed all of the elements above. However, the combined motor does not disclose explicitly that the EMI device may have a compartment in which the EMI device is located.

On the other hand, Burgess et al discloses for the purpose of suppressing EMI in motors, an EMI device 20 wherein the body has an integrally formed compartment 18 in which the EMI device is located (see figures 1-4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined motor as disclosed above and to modify the invention by having a compartment for the EMI device for the purpose of suppressing EMI in motors as disclosed by Burgess et al.



*Allowable Subject Matter*

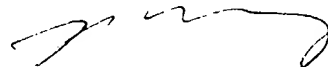
10. Claims 5, 6 and 9-12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Jcg

May 2, 2003